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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/037,822	03/10/98	MOTOYAMA S	25484.00643

EXAMINER	
WILLETT, S	
ART UNIT	**PAPER NUMBER**
2152	12

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DATE MAILED: 12/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/037,822	Motoyama
Examiner	**Group Art Unit**
Stephan Willett	2152

☒ Responsive to communication(s) filed on *Aug 29, 2000*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *23-40* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *23-40* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 23-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moline et al. with Patent Number 5,883,957 in view of Shioda with patent Number 5,430,243.

3. Regarding claims 23, 26-27, 29-31, 33-35 and 37-39, Moline teaches a quasi-real time or streaming MIDI sound playing technique. Moline teaches *reception means for receiving data blocks, each block containing time information and chronological data which represents chronological order* as "MIDI file reader includes two subcomponents ... parser reads events in order from track, each event of course includes event message and elapsed time descriptor" at col. 6, lines 44-48 in Moline et al, "the amount of track that must be accumulated before receiver begins playing the track is determined by a delay parameter set by the user of receiver" (see Moline et al. col. 12, lines 1-3) and any protocol would have chronological data. Moline teaches *storing means for temporarily storing the control data blocks received by said reception means* as "MIDI stream generator keeps track of the last event that it output, the amount of time that has actually elapsed since it began playing the track, and the total amount of time specified by the elapsed time indicators in events played thus far", (see Moline et al. col. 6, lines 26-31) and "the result of this operation is an event, which is then added to stored track in memory" at col. 6, lines

53-54. Moline teaches *judging means* for judging from the time information contained in the control block whether a predetermined time has passed as "the delay varies . the preferred embodiment waits to begin [subtracts] playing track until enough of track has accumulated" (see Moline et al. col. 11, lines 59-64), "beginning at the start of stored track, the time stamp of each event is added to the server start time and subtracted from the play time", col. 13, lines 12-14 and "MIDI stream generator generates MIDI stream from stored track as follows: ... set the timer and wait for it to expire again" at col. 7, lines 10-20 in Moline et al.. Moline teaches *processing means for starting the processing of the control data blocks temporarily stored in said storage when said judging means judges that the predetermined time has passed* as "output event messages until either an event is reached whose time stamp is greater" at col. 7, lines 15-16 in Moline et al. Moline teaches the invention in claim 1 except for explicitly *teaching a predetermined time*. In that Moline operates to buffer data for quasi-real time play the artisan would have looked to the computer data streaming arts for details of buffering signals. In that art, Shioda, a related data buffering system, teaches a "basic delay time", col. 4, lines 37 in order to delay "a voice and/or musical tone produced by an electronic musical instrument", col. 4, lines 37-38. Shioda, specifically teaches that "a basic delay time-calculating routine for calculating a basic delay time based on a timing clock of a MIDI signal is started" at col. 4, lines 46-48. A timing clock is taught that is used to determine delay times. Further, Shioda suggests that "an excellent repeat effect to the performance", col. 1, lines 65-66 will result from applying the delay times. The motivation to incorporate a delay time insures that a reference time is used to accurately apply delay times. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the delay time as taught in Shioda into the MIDI player described in the Moline patent

because Moline operates with delay times to achieve streaming data and Shioda suggests that streaming of data can be obtained with timers and set times. Therefore, by the above rational, the above claim(s) are rejected.

4. Regarding claim(s) 24, Moline teaches *producing means for producing musical tone based on the control data according to said chronological order* which is disclosed as "MIDI controller may be modified to play a Format MIDI file" (see Moline et al. col. 5, lines 56-57), therefore, the above claim(s) are rejected.

5. Regarding claim(s) 25, 28, 32, 36 and 40, Moline teaches *renumbering means for producing musical tone based on the control data to create a missing number in the chronological order* as "the presence of an incomplete element" (see Moline et al. col. 7, lines 3-4). Moline teaches said processing means stops the process during a time period required for processing a data block supposed to have the missing number as "outputting the control event messages but not the note on or note off messages" col. 8, lines 38-39 and Shioda teaches "the value of T is incremented by 1 at a step if no MIDI signal is input", col. 8, lines 22-23, therefore, the above claim(s) are rejected.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited.

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-9731.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

December 11, 2000

ROBERT B. HARRELL
PRIMARY EXAMINER